# Rain to Roots Ambassador Program-
## *March Meeting*



## **Welcome!**

- What is your name?

- Using one word, describe where you'd like to see more GSI *(streets, parks, schools, neighborhoods, etc.).*
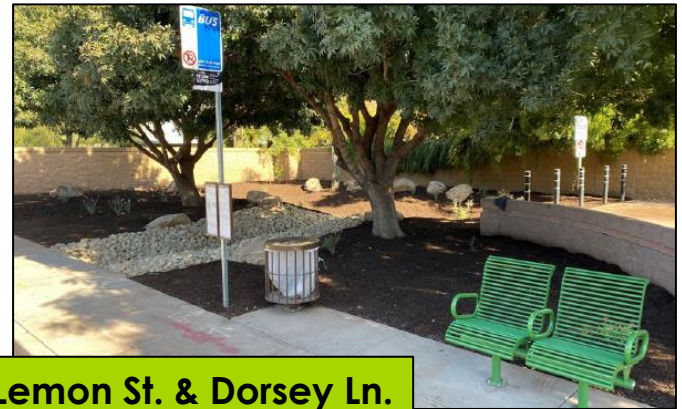
# The Strategy – Green Stormwater Infrastructure

**Benefits of GSI:**

- Supports tree canopy

- Reduces temperatures

- Reduces potable water use

- Mitigates flooding

- Promotes cleaner waterways

- Creates wildlife habitat

Learn more about GSI and its benefits at Sustainable Tempe – Green Stormwater Infrastructure.



Rio Salado Pkwy. & Hardy Dr.



Lemon St. & Dorsey Ln.

# Rain to Roots Master Plan

- **Project Purpose**
  - Expand green infrastructure & urban cooling initiatives.
  - Promote cross-departmental coordination & planning.
  - Identify opportunities for long-term funding.

*Green Stormwater Infrastructure helps us address...*



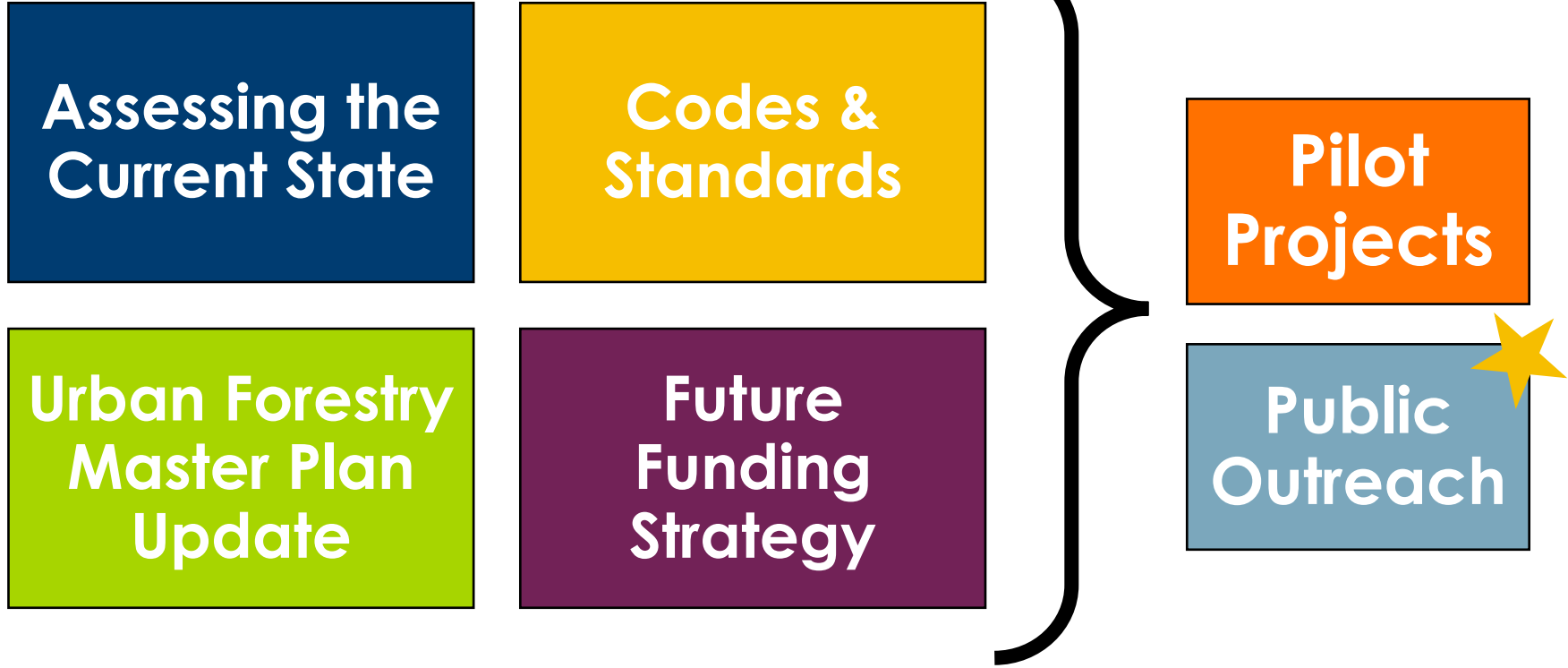Record-breaking Extreme Heat



Severe Drought & Water Use



Flooding & Water Quality Concerns



Need for Climate-Ready Vegetation

# Project Overview

**Assessing the Current State**

**Codes & Standards**

**Urban Forestry Master Plan Update**

**Future Funding Strategy**

**Pilot Projects**

**Public Outreach**

# Examples of GSI in Action



S. College Ave.

Lemon St. & Dorsey Ln.

Photos taken on 12/22/24

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# Why do Pilot Projects Matter?

- *Pilot projects help us by…*

  - **Demonstrating how GSI works** in a range of settings (streetscapes, parks, multi-use paths, neighborhoods, etc.).

  - **Increasing public awareness** of GSI models & practices.

  - **Testing new codes & design standards**.

  - **Strengthening connections** between city departments.



Mill Ave. & 13th St. Median

# Pilot Projects → Long-term Planning

- *The Rain to Roots Master Plan (MP) will …*

    - **Develop project selection criteria** to identify & prioritize future GSI sites.

    - **Support the utilization of project selection criteria** across all city departments' capital improvement projects.

    - **Create a process** for Tempe residents to suggest future GSI sites.

# City of Tempe – Project Prioritization

**Discussion Question:**

**What factors do you think that the City of Tempe considers when identifying a site for a future GSI project?**

# Selecting Future GSI Projects

| Site Selection Methodology | | |
|---|---|---|
| **Identify Priority Areas** | **Inventory Possible Sites** | **Align with City Projects** |
| • Heat Exposure<br>• Social Vulnerability<br>• Flood Susceptibility<br>• Existing Tree Canopy<br>• Water Quality Needs<br>• Walk, Bike, & Transit Scores | • Equity<br>• Visibility<br>• GSI Potential<br>   • Stormwater Capture<br>   • Tree Canopy Expansion<br>   • Space / Utility Constraints | • Multi-use Path & Streetscape Upgrades<br>• Stormwater Retrofit Projects<br>• Park Upgrades<br>• Landscape Refresh |

# Project Prioritization Matrix

| Pilot Project Name | General Description | Criteria | | | | | | | Total Score | Category Rank |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Heat Priority | GSI Potential | UF Expansion Potential | Flood Susceptibility | Water Quality | Visibility | Multimodal Access | | |
| | | Criteria Weighting (1-3) | | | | | | | | |
| | | 3 | 2 | 3 | 2 | 3 | 3 | 2 | | |
| | | Project Score (1-10) | | | | | | | | |
| **Park** | | | | | | | | | | |
| Kiwanis Park | Guadalupe Road and All American Way - Improvements around the water body, parking lot renovation, bio swales, and strategic turf removal. | 6 | 10 | 9 | 2 | 10 | 10 | 5 | 139 | 2 |
| Escalante Park | E. Orange Street and S. River Drive - GSI retrofit at north parking, possibly include curb cuts, piping water to park, and suspended pavement. | 10 | 8.5 | 8 | 2 | 10 | 9 | 5 | 142 | 1 |
| Papago North Parking Lot | E. Curry and College Avenue - Parking lot renovation: suspended pavement, curb cuts, enhanced soils, species selection. | 2 | 8.5 | 9 | 2 | 1 | 3 | 2 | 70 | 4 |
| Tempe Sports Complex | S. Hardy Drive and W. Carver Road - Parking lot renovation utilizing permeable and suspended pavement, grading, and emphasis on pedestrian safety. | 6 | 6 | 9 | 2 | 1 | 6 | 3 | 88 | 3 |
| **Streetscape** | | | | | | | | | | |
| Mill Avenue - Downtown | Mill Avenue, Rio Salado Parkway to University Drive - Consult with J2 on GSI components (Silva Cell/suspended pavement system), past experience can help mitigate design issues. | 2 | 9 | 9 | 4 | 10 | 10 | 10 | 139 | 1 |
| Country Club Way | Country Club Way, Meadow to Cairo - Road diet, traffic calming, and addition of planters and bike lanes. | 8 | 7.5 | 9 | 2 | 10 | 5 | 3 | 121 | 4 |
| Roosevelt Storm Drain Project (EPG) | Assist EPG with GSI implementation on project. Adjacent to Scottsdale, centered on Roosevelt and Scottsdale Road. | 4 | 9 | 10 | 2 | 10 | 7 | 5 | 125 | 3 |
| Hardy Drive | Hardy Drive, Southern Avenue to Baseline Road - Opportunities for traffic calming features. Effort will require coordination with the Traffic Engineering group. | 10 | 7.5 | 8 | 6 | 10 | 5 | 6 | 138 | 2 |

# Feedback & Discussion

- **What do you think about these criteria?**

- **Are there any criteria that you feel are missing?**

- **What concerns do you have about this prioritization process?**

- **How could the City make this process more transparent?**

# City of Tempe – Project Prioritization

**Discussion Question:**

**What methods could the City of Tempe use to solicit feedback from Tempe residents on the location of future GSI projects?**

# Public Feedback & Engagement Strategies

- **Expanding educational offerings** to raise awareness of GSI as a solution for urban cooling.

- Creating opportunities for community members to **identify neighborhood-level needs** & vulnerabilities (heat, flooding, etc.).

- **Expanding the Neighborhood Grants program** to fund projects that emphasize water harvesting and urban cooling.

- **Developing new programs** for Tempe residents to participate in installing and caring for green stormwater infrastructure.

- *Others?*

# Mapping Community Needs

- **City of Tempe's Resilience Hub Network - Community Identified Spaces Map**

- Interactive GIS map to identify trusted spaces & neighborhood vulnerabilities.

- Can use map to identify high-heat area, flooding.
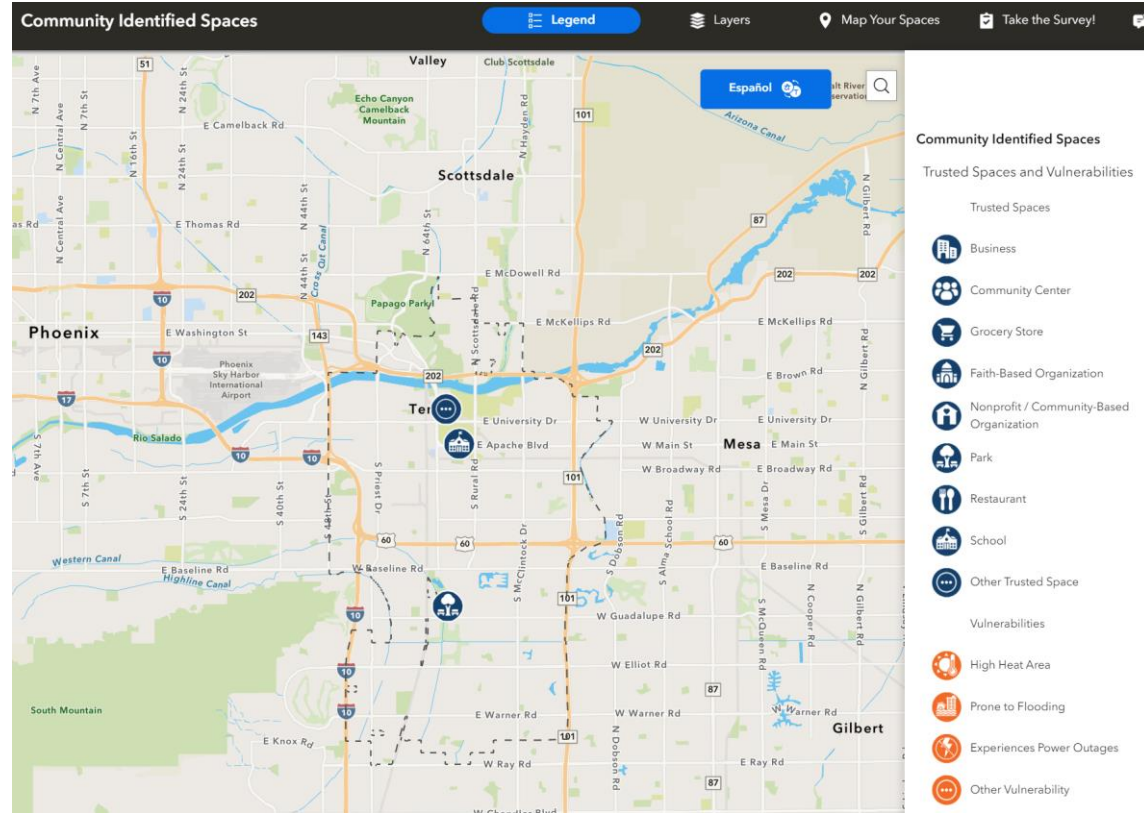
# Neighborhood Grants Announcement

**New Neighborhood Grants Category!**

- Projects focused on **rainwater harvesting (GSI)**

- *Projects can integrate GSI into…*
    - Neighborhood & collector streets
    - HOA streets
    - Parks
    - Alleys
    - Transit stops
    - Traffic circles & chicanes
    - Other public right-of-way areas



## Water Harvesting Guidelines

The City of Tempe Sustainability & Resilience Office (SRO) is developing a city-wide water harvesting program, "Rain to Roots", that will implement green stormwater infrastructure that channels all rainfall and drainage into existing and new planting areas. Rather than sending rainfall and drainage away to the stormwater system, this program aims to capture and infiltrate the water into the landscape, helping to reduce water consumption while expanding our urban forestry canopy. The Rain to Roots program will provide new plant material, tree canopy and urban forest enhancements, and built infrastructure to maximize rain and drainage collection while addressing the increasing challenge of extreme heat.

Potential projects would include:
- Neighborhood and collector streets
- HOA streets, parks, alleys
- Transit stops
- Other public rights of way that have the ability to create new water harvesting and planting areas.

Rain to Roots projects can be partnered with traffic calming or water conservation projects:
- Traffic circles or chicanes that can capture rain
- Turf conversion projects that include rain capture infrastructure.

Coordination with partner teams at the city may be required (e.g. Transportation) for project affecting a street or other infrastructure. Long term maintenance of any potential project implemented would need to be identified before project funding.

Process:
1. Meet with Sustainability & Resilience Office (SRO) staff to discuss ideas
2. SRO will recommend specific achievable projects
3. Neighborhoods and HOA's host their area meetings to determine project support
4. Project sponsors ensure support from any property immediately adjacent to the new project idea
5. All projects must have licensed contractors for construction and landscape installs
6. Identify long term project maintenance responsibilities.
7. If you are an HOA and are awarded a grant, your project will be processed through Community Development to amend your HOA's existing landscape plan. Your award letter will cover next steps.

Program Contact: Maddie Mercer, Sustainability & Resilience Program Coordinator
480-350-8864 or Maddie_mercer@tempe.gov

# Feedback & Discussion

- **What do you think about these strategies?**

- **How else could the City solicit community input?**

- **Which of these engagement opportunities would you be interested in, and why?**

- **What other engagement opportunities would you like to see the City develop?**

# Upcoming Ambassador Program Meetings

**Meetings on the First Wednesday of the Month, 5:30-6:30 PM**

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**April 3rd: Urban Forestry Master Plan Update & Next Steps**

**May 1st: Master Plan Deliverable Review**

# Questions?

Contact Maddie Mercer, Sustainability & Resilience Office

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Email: Maddie_Mercer@tempe.gov

Phone: 480-355-8864